



SRS Site Needs



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Aluminum/Chromium Leaching Technical Exchange
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Sludge Mass Reduction Program Concept

➤ Two Key Objectives:

- 1) Improve Life Cycle Completion Date from 2035 to 2028
 - Aligns with Site Treatment Plan
- 2) Reduce Overall Canisters Produced
 - Reduces legacy cost

➤ Recommend Multi-Phased Approach

Multi-Phase Approach Concept

Tank Farm Condition	Sludge Mass Reduction	Glass Formers	Batching	Melter
<ul style="list-style-type: none"> •No salt process •No extra tank space 	<ul style="list-style-type: none"> •Develop overall strategy •Document in Planning Documents 	<ul style="list-style-type: none"> •Deployment plan for alternate frits 	<ul style="list-style-type: none"> •Delay high Al tanks 	<ul style="list-style-type: none"> •Initiate alternative melter testing
<ul style="list-style-type: none"> •Interim Salt Treatment (ARP/MCU) operating •Some space 	<ul style="list-style-type: none"> •Do what we can with simple, affordable modifications: <ul style="list-style-type: none"> –Low temperature –1 or 2 NaOH strikes –Store Al-rich stream in Tanks 11/13 	<ul style="list-style-type: none"> •Deploy alt frits: <ul style="list-style-type: none"> –Increase melt rate –Increase throughput 	<ul style="list-style-type: none"> •Develop plan for Tanks 23/47: <ul style="list-style-type: none"> - This waste is not HLW by definition but has been contaminated with HLW 	<ul style="list-style-type: none"> •Develop plan for alternative melter deployment
<ul style="list-style-type: none"> •SWPF operating •Adequate space •Purge point for Al-rich stream 	<ul style="list-style-type: none"> •Longterm mods: <ul style="list-style-type: none"> –Hi temp –Dedicated tank –Al rich stream to SWPF 	<ul style="list-style-type: none"> •Continue to refine frits 	<ul style="list-style-type: none"> •Implement plan for Tanks 23/47 	<ul style="list-style-type: none"> •Deploy alternative melter: <ul style="list-style-type: none"> –Waste loading –Throughput